

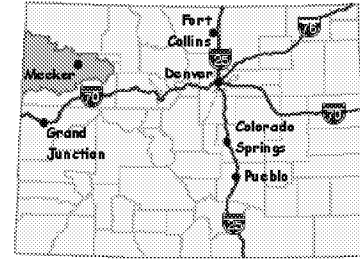
NEPA Projects and Reviews by State (2013 – 2016)

238 reviews total

	CO	MT	ND	SD	UT	WY
Projects:	14	9	4	2	17	23
Reviews:	30	28	15	5	76	92

[illegible]

Potential Regional impacts to PM and ozone.

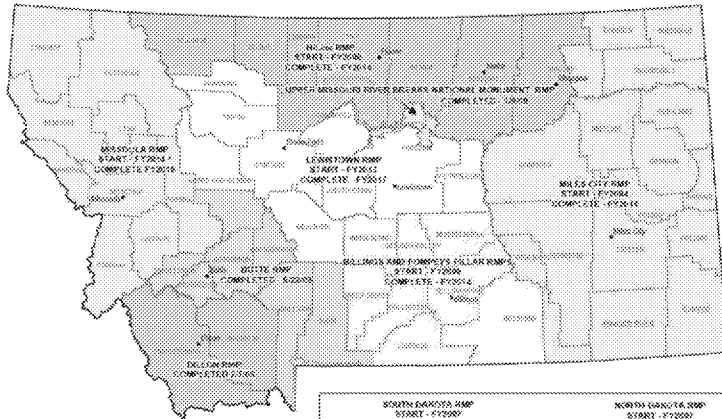


- Tier 4 drill rigs
- requirements to use three way gathering systems
- high level of dust control
- reduction in VOC content prior to discharge to ponds

2,866 in year 2010
About 12,943 wells by 2030

Montana – Photochemical Grid Model to support planning efforts in Montana and the Dakotas

ONGOING & FUTURE LAND USE PLANNING BOUNDARIES MONTANA/DAKOTAS



PGM used to support RMPs:

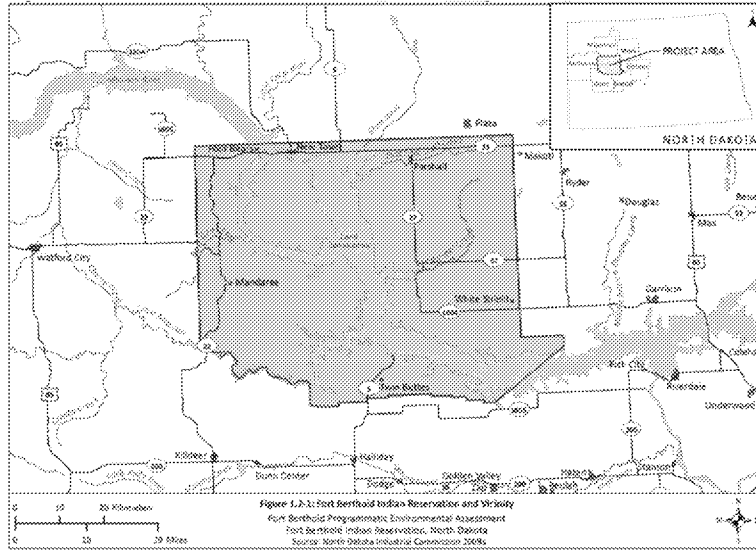
Miles City; HiLine; Billings/Pompeys
Pillar; South Dakota; Lewistown;
Missoula; North Dakota

Also can be used for other projects that
are within the PGM domain

Potential impacts minimized by
applying mitigation at the RMP phase
and use of adaptive management –
pollutants addressed by adaptive
management: Ozone, PM, NO_x, SO₂,
CO; visibility; deposition (including lake
acidification)

- Tier 4 drill rigs
- Dust control
- Additional considerations for
reduced emission completions
- Monitoring based trigger for further
mitigation

North Dakota – Fort Berthold Indian Reservation Programmatic EA



1740 wells; 435 well pads

Decision will now be informed by MT/DK Regional modeling as well as near-field dispersion modeling

EA is not yet public

Ex. 5 Deliberative Process (DP)

Consistency with MT/DK RMP's.

EIS projects cumulative wells considering existing and well life:

1,673 wells in 2015

3,580 wells by 2021

In the interim period prior to the FONSI, wells are being approved on an individual basis through EA's or Categorical Exclusions (CATEX)

Legend

- Political boundary
- Protected Wild Area
- Great Plains pocket gopher distribution
- 1-10 Study sites
- A-D Study sites
- Scale bar
- North arrow

-

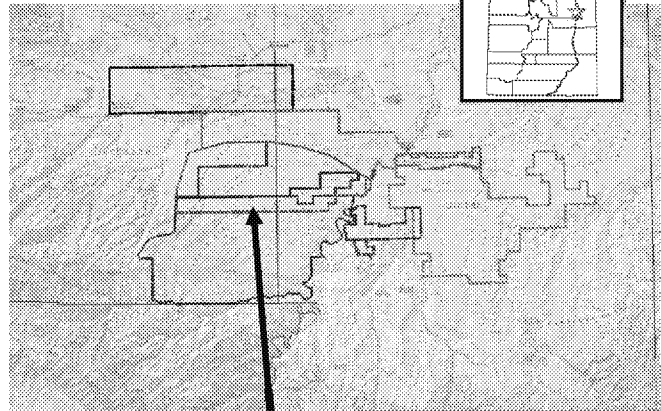
Ex. 5 Deliberative Process (DP)

Figure 2.1-6. Map of Dewey-Burdock *In-Situ* Recovery Project Area Showing Locations of the Dewey Satellite Facility, Burdock Central Plant, Mapped Orebodies, and Proposed Wellfields
Source: Modified From Powertech (2011)

Utah – Monument Butte Oil and Gas Infill Project EIS

- Project proposed by Newfield Exploration Company to develop infill of the project area.
- The Preferred Alternative represents 5,750 new wells and associated processing infrastructure (including water flood operations)
- There are 3,395 existing wells in the project area

Ex. 5 Deliberative Process (DP)



Legend

- | | |
|--|--------------------------------------|
| Castle Peak and 8-Mile Flat EIS | Greater Monument Butte EIS - Pending |
| Gasco EIS | Ouray Field EA |
| Greater Natural Buttes Gas Development | Newfield EDA #1 |
| Kings Canyon | Rocky Point EDAEA |
| North Alger EA | Randlett EDA |
| River Bend Unit Infill | |

Project area encompasses 119,743 acres

Surface ownership:

87% federal

11% state of Utah

2% private

Mineral interest are owned by:

89% BLM

10% State of Utah

Less than 1% private

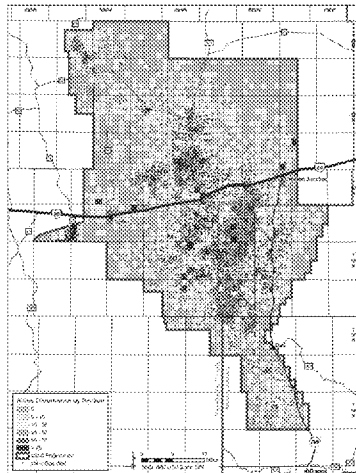
Split estate comprise 18%

Wyoming – Continental Divide-Creston (CD-C) Project EIS

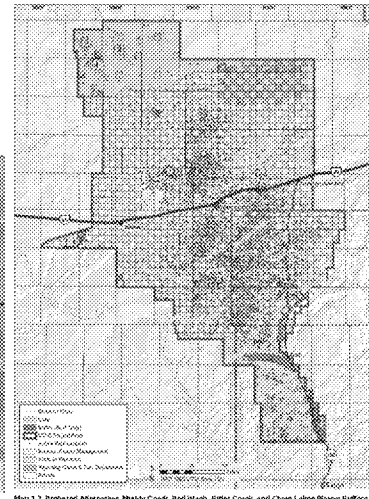
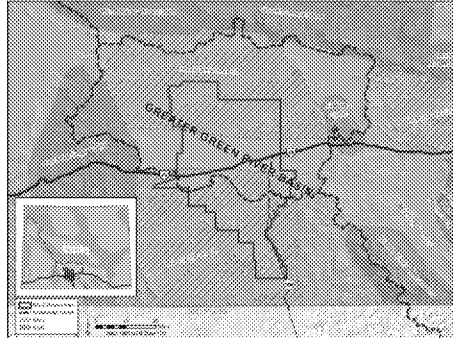
8950 new natural gas wells and associated infrastructure

Currently the largest proposed “project” EIS

Existing Surface Disturbance and Wells



Ex. 5 Deliberative Process (DP)



Map 3-3. Proposed Alternatives: Muddy Creek, Red Wash, Bitter Creek, and Chalk Lake-Pepper Springs

Western States Air Quality Study (WSAQS)

Western States Air Quality Study (WSAQS)

Summary

- NEPA is a significant R8 air program workload, Oil and gas continues to be the Air/NEPA focal point, WAQS is an important piece to future NEPA and Air Quality planning in the western US.